What is claimed:

1. A polymer for the reduction of aluminosilicate containing scale according to the formula:

$$--((CH_2)_2--N)_x--((CH_2)_2--N)_y--$$
$$/$$
$$(CH_2)_3-Si(OCH_3)_3$$
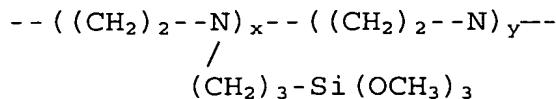
where $x = 0.5-20\%$, $y = 99.5-80\%$.

2. A polymer for the reduction of aluminosilicate containing scale according to formula:

$$-(CH_2CHQ)_w-((CH)-(CH))_x----------((CH)-(CH))_y--((CH)---(CH))_z$$
$$/ \qquad / \qquad\qquad\qquad\qquad / \qquad / \qquad\qquad / \qquad /$$
$$COOR \quad COX-R'-Si(OR'')_3 \quad COOR \quad COD \quad\quad CO_2R'' \quad CO_2R''$$
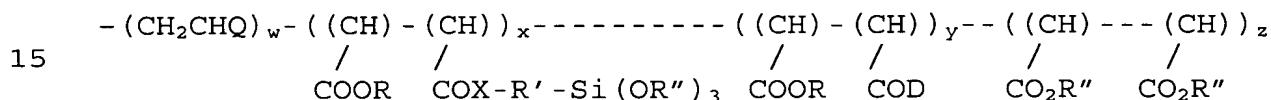
where

$w = 1-99.9\%$, $x = 0.1-50\%$, $y = 0-50\%$, $z = 0-50\%$; and

$Q = C1-C10$ alkyl, aryl, amide, acrylate, ether, COXR where X=O or NH and R=H, C1-C10 alkyl or aryl, or any other substituent;

$R = H, Na, K, NH_4$;

$X = NH, NR''$ or O;

$R' = C1-C10$ alkyl, or aryl;

$R'' = H, C1-C3$ alkyl, aryl, Na, K or NH_4; and

$D= NR''_2$ or OR'', with the proviso that all R and R'' groups do not have to be the same.

3. The polymer for the reduction of aluminosilicate containing scale according to the formula:

$$-(CH_2CHQ)_w---((CH)(CH))_x--((CH)--(CH))_y-((CH)(CH))_z$$
$$/ \qquad / \qquad\qquad / \qquad / \qquad\qquad / \qquad /$$
$$CO \quad CO_2NH_4 \quad CO_2NH_4 \quad CO_2NH_4 \quad\quad CO \quad CO_2NH_4$$
$$/ \qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad /$$
$$NH(CH_2)_3Si(OC_2H_5)_3 \qquad\qquad\qquad N(C_2H_5)_2$$
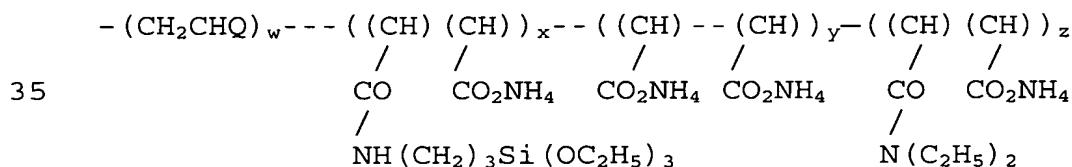
where $w =1-99.9\%$, $x=0.1-50\%$, $y=0-50\%$, $z=0-50\%$; and Q is phenyl.

19

4. A polymer for the reduction of aluminosilicate containing scale according to the formula:

$$(CH_2\text{--}CH)_x \text{---} (CH_2\text{-}CH)_y \text{---} (CH_2\text{--}CH)_z \text{---}$$
$$\qquad \Big/ \qquad\qquad \Big/ \qquad\qquad \Big/$$
$$\quad CONH_2 \qquad\quad COOM \qquad\quad Si(OR'')_3$$
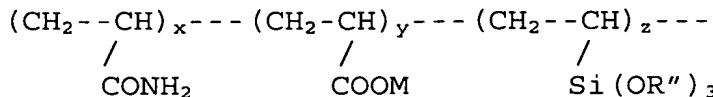
where:
$x= 1\text{-}99\%$, $y=1\text{-}99\%$, $z=0.5\text{-}20\%$ and
$M = Na, K, NH_4$; and
$R'' = H, C1\text{-}C3$ alkyl, aryl, Na, K or NH_4.

5. The polymer for use in the reduction of aluminosilicate containing scale according to the formula:

$$(CH_2\text{--}CH)_x \text{---} (CH_2\text{-}CH)_y \text{---} (CH_2\text{--}CH)_z \text{---}$$
$$\qquad \Big/ \qquad\qquad \Big/ \qquad\qquad \Big/$$
$$\quad CONH_2 \qquad\quad COONa \qquad\quad Si(OH)_3$$
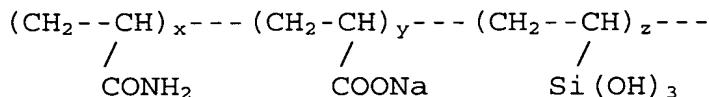
where:
$x= 1\text{-}99\%$, $y=1\text{-}99\%$, $z=0.5\text{-}20\%$.

6. A polymer for use in the reduction of aluminosilicate containing scale, wherein the polymer is a graft copolymer of formula a or formula b:

$$-(polymer)\text{--}graft\text{--}((CH)\text{---}(CH))_x \qquad\qquad Formula\ VIIa$$
$$\qquad\qquad\qquad\qquad\quad \Big/ \qquad \Big/$$
$$\qquad\qquad\qquad\qquad\quad COOH \quad COX\text{-}R'\text{-}Si(OR'')_3$$

$$((CH)\text{---}(CH))_x\text{--}graft\text{--}(polymer)\text{-} \qquad\qquad Formula\ VIIb$$
$$\quad \Big/ \qquad \Big/$$
$$\quad COOH \quad COX\text{-}R'\text{-}Si(OR'')_3$$
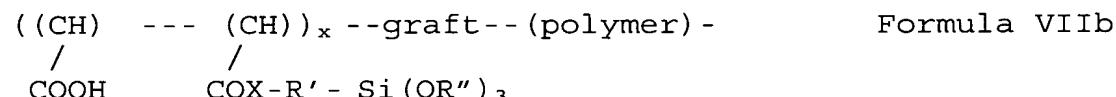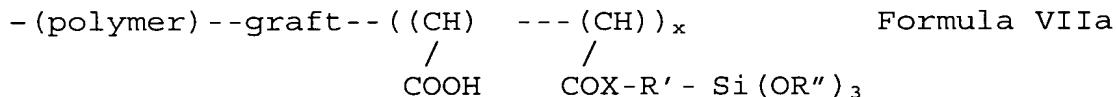
where $x = 0.1 - 99\%$ (as percentage of monomer
units in the polymer) and
$X = NH, NR'$ or O;
$R' = C1\text{-}C10$ alkyl, or aryl and
$R'' = H, C1\text{-}C3$ alkyl, aryl, Na, K or NH_4.

7.   The polymer for use in the reduction of aluminosilicate
containing scale according to claim 6 according to the
formula:

(polymer)---CH ---CH$_2$ (polymer)---CH----CH$_2$
              /   /   /   /
             CO   CO$_2$NH$_4$ CO$_2$NH$_4$ CO
             /   /
          NH(CH$_2$)$_3$Si(OC$_2$H$_5$)$_3$ NH(CH$_2$)$_3$Si(OC$_2$H$_5$)$_3$